

THE OFFICE OF REGULATORY STAFF
SETTLEMENT TESTIMONY AND EXHIBITS
OF
LEIGH C. FORD

MAY 28, 2009



DOCKET NO. 2009-1-E

**ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS
OF CAROLINA POWER & LIGHT COMPANY
d/b/a PROGRESS ENERGY CAROLINAS, INC.**

SETTLEMENT TESTIMONY OF

LEIGH C. FORD

FOR

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2009-1-E

IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF

CAROLINA POWER AND LIGHT COMPANY

d/b/a PROGRESS ENERGY CAROLINAS, INC.

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND
OCCUPATION.**

A. My name is Leigh Ford. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as an Electric Specialist in the Electric Department for the Office of Regulatory Staff ("ORS").

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND
EXPERIENCE.**

A. I received a Bachelor's Degree in Communications from Lenoir-Rhyne University in 2002. Prior to my employment with ORS I was a Field Service Representative with the South Carolina Budget and Control Board. In November 2007 I joined ORS.

Q. WHAT IS THE PURPOSE OF YOUR SETTLEMENT TESTIMONY IN THIS PROCEEDING?

A. The purpose of my settlement testimony is to set forth ORS Electric Department's findings and recommendations resulting from its review of Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.'s ("PEC" or "Company") fuel expenses and power plant operations used in the generation of electricity for the period under review. The review period includes actual data for March 2008 through February 2009, estimated data for March 2009 through June 2009, and forecasted data for July 2009 through June 2010. My testimony will also set forth the adjustments agreed upon in the Settlement Agreement ("Settlement Agreement") between ORS, PEC, and Nucor Steel – South Carolina, (collectively referred to as the "Parties"). The findings and recommendations are set forth below and in the settlement exhibits attached to this settlement testimony.

Q. WHAT AREAS WERE ENCOMPASSED IN YOUR REVIEW OF THE COMPANY'S FUEL EXPENSES?

A. ORS reviewed various fuel and performance related documents as part of its review. The information reviewed addressed energy generation and plant maintenance activities. In preparation for this proceeding, ORS analyzed the Company's monthly fuel reports including power plant performance data, unit outages and generation statistics. ORS evaluated nuclear fuel, coal, natural gas, and transportation contracts and the reagent related contracts for ammonia and limestone. ORS also evaluated the Company's policies and procedures for fuel

procurement. All information was reviewed with reference to the Company's existing Adjustment for Fuel and Variable Environmental Costs Rider and the Fuel Clause statute.

Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS'S REVIEW OF THE COMPANY'S REQUEST IN THIS PROCEEDING?

A. ORS met with Company personnel from various departments including Power System Operations, Regulated Fuels and Transportation, Natural Gas and Oil Procurement, Power Trading Operations, Nuclear Fuel Supply, Nuclear Engineering, and Fuel Forecasting at the Company's headquarters in Raleigh, NC. Also, ORS reviewed documentation of natural gas purchases for operation of the Company's natural gas fueled generating facilities. In addition, on a daily basis, ORS keeps abreast of the coal and natural gas industry through industry and governmental publications.

Q. DID ORS EXAMINE THE COMPANY'S PLANT OPERATIONS FOR THE REVIEW PERIOD?

A. Yes. ORS reviewed the Company's performance of its generating facilities to determine if the Company made reasonable efforts to minimize fuel costs. ORS also reviewed the availability and capacity factors of the Company's power plants. Settlement Exhibit LCF-1 shows the monthly availability factors of the Company's major generating units stated in percentages. The corresponding capacity factors in Settlement Exhibit LCF-2 indicate the monthly utilization of each unit in producing power.

1 **Q. PLEASE EXPLAIN THE SIGNIFICANCE OF PLANT AVAILABILITY**
2 **AND HOW IT IS USED IN YOUR EVALUATION AS REPRESENTED ON**
3 **SETTLEMENT EXHIBIT LCF-2.**

4 **A.** Settlement Exhibits LCF-3 and LCF-4 show a summary of the Company's
5 major fossil and nuclear units' outages for the review period, respectively. With
6 reference to Settlement Exhibit LCF-1, months where generation units show zero
7 availability as well as those months showing less than 100% availability led ORS
8 to examine the reasons for such occurrences. Settlement Exhibits LCF-1 through
9 LCF-4 should be used in concert to evaluate the Company's plant operations. As
10 an example, Settlement Exhibit LCF-1 shows Robinson Unit #2 had zero
11 availability in October 2008. Settlement Exhibit LCF-4 explains the reason for
12 the zero availability during that time period. The Robinson Unit #2 had a
13 scheduled refueling outage between September 26, 2008 and November 7, 2008;
14 and therefore, the unit was not available to generate electricity during this time
15 period.

16 **Q. WOULD YOU EXPLAIN HOW THE OTHER OUTAGES ARE**
17 **REPRESENTED ON SETTLEMENT EXHIBITS LCF-3 AND LCF-4?**

18 **A.** Yes. Settlement Exhibit LCF-3 provides explanations for major fossil unit
19 outages of 100 hours or greater although our review includes all outages. While
20 not included in this Exhibit, fossil outages of less than 100 hours were also
21 reviewed and found to be reasonable by ORS. Settlement Exhibit LCF-4 provides
22 explanations for all nuclear plant outages during the review period.

23

1 which can be attributed to a decrease in the cost of natural gas. However, these
2 units are a small percentage of the overall generation mix and the baseload fossil
3 and nuclear units continue to supply the majority of the year-round generation
4 requirements.

5 **Q. WHY DID YOU REFER TO THE COMBUSTION TURBINE AND**
6 **COMBINED-CYCLE UNITS AS HAVING HIGHER COSTS?**

7 **A.** Settlement Exhibit LCF-6 shows the Company's average fuel costs by
8 generating plant on the Company's system for the review period and the
9 megawatt-hours produced by these plants. ORS's review revealed the lowest
10 average fuel cost of 0.470 cents per kilowatt-hour ("kWh") at the Harris Nuclear
11 Station, and the highest average period fuel cost of 9.003 and 10.396 cents per
12 kWh at the Richmond County combined-cycle and combustion turbine gas-fired
13 units, respectively. The Company utilizes economic dispatch, which generally
14 tends to dispatch or bring on-line the lowest cost units first.

15 **Q. HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S**
16 **FORECAST?**

17 **A.** Yes. As shown in Settlement Exhibit LCF-7, the Company's MWH actual
18 sales compared to forecasted sales varied by 7.15% during the review period. In
19 addition, Settlement Exhibit LCF-8 shows the monthly variance between
20 projected and actual fuel cost factors. The Company's cumulative average
21 projected fuel cost level for the period was 3.87% below the actual resulting cost
22 level.

1 expenses which was originally calculated in Barkley Exhibit No. 10 (lines 5 and
2 16). This depreciation expense is for an SCR catalyst, which is used to remove
3 nitrous oxide (NO_x). As agreed upon by the Parties, the Company will defer as a
4 Regulatory Asset the depreciation expense associated with this pollution control
5 device as approved by Commission Order No. 2009-38. Therefore ORS
6 recommends a \$1.6 million adjustment to remove costs associated with catalyst
7 depreciation. ORS Settlement Exhibits LCF 11, 12, and 13 correspond with PEC
8 witness Barkley's Exhibits 9, 10, and 11 in this regard and show the resulting fuel
9 factors.

10 **Q. DO YOU SUPPORT THE SETTLEMENT AGREEMENT EXECUTED BY**
11 **THE PARTIES IN THIS HEARING?**

12 **A.** Yes, I do.

13 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

14 **A.** Yes, it does.

Power Plant Performance Data Report
Availability Factors (Percentage)
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E

HISTORICAL DATA						REVIEW PERIOD (ACTUAL) DATA												
PLANT	UNIT	MW RATING	YEAR 2006	YEAR 2007	YEAR 2008	MAR 2008	APR 2008	MAY 2008	JUN 2008	JUL 2008	AUG 2008	SEP 2008	OCT 2008	NOV 2008	DEC 2008	JAN 2009	FEB 2009	Average Review Pd.
BRUNSWICK	1 ¹	938	85.7	93.4	84.1	44.6	1.5	98.6	100.0	100.0	99.4	100.0	100.0	65.6	99.5	100.0	97.5	83.9
BRUNSWICK	2 ²	937	88.5	86.4	95.0	90.4	99.1	100.0	99.1	100.0	95.5	84.4	99.9	72.2	100.0	98.8	95.5	94.6
HARRIS	1 ³	900	88.4	93.1	97.1	99.8	100.0	100.0	100.0	100.0	65.8	100.0	100.0	100.0	100.0	100.0	100.0	97.1
ROBINSON	2	710	99.1	88.6	83.3	98.1	100.0	100.0	100.0	100.0	100.0	81.5	0.0	27.4	92.4	100.0	100.0	83.3
NUCLEAR TOT		3485	90.4	90.4	89.9	83.2	75.1	99.7	99.8	100.0	90.2	91.5	75.0	66.3	98.0	99.7	98.2	89.7
MAYO	1 ⁴	742	92.0	91.3	95.3	77.8	100.0	100.0	97.5	100.0	99.0	100.0	73.6	99.4	98.4	100.0	100.0	95.5
ROXBORO	2 ⁵	671	94.7	85.6	91.4	84.8	100.0	91.1	92.0	95.1	92.1	99.6	52.6	97.7	94.4	98.9	84.0	90.2
ROXBORO	3	705	80.3	93.8	89.1	80.4	58.5	82.2	99.9	96.6	99.9	80.9	98.1	93.5	92.4	97.8	87.2	88.9
ROXBORO	4	698	95.6	84.5	96.0	97.8	100.0	93.8	98.3	99.8	99.9	87.8	99.9	98.7	100.0	99.9	92.4	97.4
FOSSIL TOTALS		2816	90.7	88.8	93.0	85.2	89.6	91.8	96.9	97.9	97.7	92.1	81.1	97.3	96.3	99.1	90.9	93.0
RICHMOND	7	149	91.7	89.4	91.5	100.0	89.7	78.8	99.2	92.6	100.0	100.0	91.9	45.8	99.7	98.9	100.0	91.4
RICHMOND	8	149	90.3	82.9	91.6	100.0	88.2	81.9	100.0	92.8	100.0	100.0	92.3	44.1	99.5	98.9	100.0	91.5
RICHMOND	ST4	168	91.5	96.2	93.6	100.0	91.4	100.0	99.6	92.8	100.0	100.0	92.1	46.8	100.0	99.0	100.0	93.5
CC TOTALS ⁶		466	91.2	89.5	92.2	100.0	89.8	86.9	99.6	92.7	100.0	100.0	92.1	45.6	99.7	98.9	100.0	92.1

¹ Brunswick Unit 1: North Carolina Eastern Municipal Power Agency No. 1 (18.33%) and Progress Energy Carolinas (81.67%)

² Brunswick Unit 2: North Carolina Eastern Municipal Power Agency No. 1 (18.33%) and Progress Energy Carolinas (81.67%)

³ Harris Unit 1: North Carolina Eastern Municipal Power Agency No. 1 (16.17%) and Progress Energy Carolinas (83.83%)

⁴ Mayo Unit 1: North Carolina Eastern Municipal Power Agency No. 1 (16.17%) and Progress Energy Carolinas (83.83%)

⁵ Roxboro Unit 4: North Carolina Eastern Municipal Power Agency No. 1 (12.94%) and Progress Energy Carolinas (87.06%)

⁶ CC designates Combined-Cycle units

**Power Plant Performance Data Report
Capacity Factors (Percentage)
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E**

HISTORICAL DATA							REVIEW PERIOD (ACTUAL) DATA												
PLANT	UNIT	MW RATING	LIFE ¹ TIME	YEAR 2006	YEAR 2007	YEAR 2008	MAR 2008	APR 2008	MAY 2008	JUN 2008	JUL 2008	AUG 2008	SEP 2008	OCT 2008	NOV 2008	DEC 2008	JAN 2009	FEB 2009	Average Review Pd.
BRUNSWICK	1	938	70.5	85.5	95.9	85.2	41.2	1.1	101.0	101.6	101.4	100.7	102.0	102.7	67.0	102.1	103.1	100.1	85.3
BRUNSWICK	2	937	67.9	87.6	87.1	95.4	91.7	100.2	100.0	98.2	99.1	94.4	83.9	100.4	72.8	101.1	101.8	97.7	95.1
HARRIS	1	900	85.7	84.7	94.0	99.0	102.3	102.0	101.5	100.1	100.4	65.2	101.3	102.5	103.1	103.3	103.6	103.3	99.0
ROBINSON	2	710	76.1	95.2	92.3	87.1	104.8	105.9	104.9	102.7	102.0	101.5	82.8	0.0	27.6	99.3	107.6	107.6	87.2
NUCLEAR TOT		3485	75.1	87.8	92.3	91.9	83.5	75.2	101.7	100.5	100.7	90.0	93.0	81.1	69.8	101.6	103.8	101.8	91.7
MAYO	1	742	n/a	71.5	72.1	62.7	48.6	67.0	41.9	72.0	69.3	64.7	64.2	39.4	71.9	67.3	80.6	73.0	63.3
ROXBORO	2	671	n/a	66.0	80.0	78.4	77.0	88.7	68.9	79.9	80.8	75.0	83.9	36.2	86.1	81.0	94.9	74.9	77.3
ROXBORO	3	705	n/a	62.6	74.4	66.0	63.5	44.0	53.1	78.9	70.1	71.9	53.5	66.9	74.5	69.7	83.2	65.9	66.3
ROXBORO	4	698	n/a	66.9	62.5	70.3	75.5	77.4	50.8	79.5	79.0	74.1	55.5	66.7	77.3	72.8	81.0	72.0	71.8
FOSSIL TOT		2816	n/a	66.8	72.2	69.1	65.8	69.0	53.4	77.5	74.6	71.3	64.1	52.3	77.3	72.5	84.8	71.4	69.7
RICHMOND	7	149	n/a	19.3	39.3	37.9	23.8	0.0	0.0	54.4	51.0	75.1	43.2	66.5	46.2	39.7	43.4	50.5	41.1
RICHMOND	8	149	n/a	19.8	31.6	40.7	23.0	0.0	0.0	60.1	50.8	75.6	47.0	78.8	44.6	45.4	43.0	52.9	43.4
RICHMOND	ST4	168	n/a	22.3	38.5	39.7	24.7	0.0	0.0	60.4	52.8	75.9	45.9	72.3	42.9	41.2	44.8	50.6	42.6
CC TOTALS ²		466	n/a	20.5	36.6	39.5	23.9	0.0	0.0	58.4	51.6	75.6	45.4	72.5	44.5	42.1	43.8	51.3	42.4

¹The lifetime nuclear unit capacity factors are through February 2009

²CC designates Combined-Cycle units

**Fossil Unit Outage Report
(100 Hrs or Greater Duration)
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E**

UNIT	DATE OFF	DATE ON	HOURS	TYPE	EXPLANATION OF OUTAGE
Mayo 1	10/23/08	10/29/08	123.08	Forced	Unit was forced offline due to a tube leak and generator exciter malfunction
Roxboro 2	10/4/08	10/18/08	339.18	Planned	Unit was taken offline for fall outage and a boiler inspection
Roxboro 3	4/19/08	5/6/08	418.95	Planned	Unit was taken offline for scheduled spring outage and to complete installation of scrubber
Roxboro 3	9/10/08	9/15/08	102.08	Planned	Unit was taken offline for inspections of the flue gas desulfurization system components

Nuclear Unit Outage Report
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E

UNIT	DATE OFF	DATE ON	HOURS	TYPE	EXPLANATION OF OUTAGE
Brunswick 1	3/15/2008	4/29/2008	1092.90	Planned	Unit was taken offline due to scheduled refueling
Brunswick 1	11/19/2008	11/26/2008	156.42	Maintenance	Unit was taken offline to address and correct leakage on the 1A Reactor recirculation Pump Seal
Brunswick 1	11/26/2008	11/29/2008	74.95	Forced	Unit was forced offline due to a malfunction of the Electro-Hydraulic Control system
Brunswick 2	3/4/2008	3/6/2008	42.83	Forced	Unit was forced offline due to a steam leak on the feedwater drain line
Brunswick 2	8/30/2008	9/4/2008	108.77	Forced	Unit was forced offline due to a power/load unbalance PLU Circuit Relay Actuation
Brunswick 2	11/9/2008	11/17/2008	183.97	Forced	Unit was forced offline due to a failure of a safety relief valve
Brunswick 2	2/28/2009	4/29/2009 ¹	1438.38	Planned	Unit was taken offline due to scheduled refueling
Harris 1	8/11/2008	8/21/2008	249.15	Forced	Unit was forced offline due to a condenser boot seal leak
Robinson 2	9/26/2008	11/7/2008	1032.10	Planned	Unit was taken offline due to scheduled refueling
Robinson 2	11/17/08	12/01/08	348.00	Forced	Unit was forced offline due to high vibrations in the main turbine
Robinson 2	12/20/08	12/20/08	22.63	Maintenance	Unit was taken offline to address continued excessive turbine vibration

Note 1: This outage ended after the review period.

MWH Generation Mix (March 2008 – February 2009)
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E

MONTH	PERCENTAGE					
	FOSSIL	NUCLEAR	COMBUSTION TURBINE	COMBINED CYCLE	HYDRO	PURCHASED POWER
2008						
March	49.6	43.9	1.0	1.7	1.7	2.1
April	54.9	39.9	0.3	0.0	1.6	3.3
May	39.9	53.9	0.7	0.0	1.1	4.4
June	45.6	41.2	4.2	3.2	0.5	5.3
July	45.3	42.2	2.8	2.9	0.4	6.4
August	43.5	38.0	3.3	4.3	0.3	10.6
September	41.9	44.0	2.0	2.9	0.5	8.7
October	39.9	43.8	0.9	5.2	0.4	9.8
November	47.0	35.4	2.8	3.0	0.4	11.4
December	44.0	47.5	0.8	2.6	1.3	3.8
2009						
January	47.5	43.6	1.1	2.5	1.3	4.0
February	44.3	46.8	0.9	3.3	0.8	3.9
Average	45.3	43.4	1.7	2.6	0.9	6.1

**Generation Statistics for Plants
(March 2008 – February 2009)
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E**

PLANT	TYPE FUEL	AVERAGE FUEL COST¹ (CENTS/KWH)	GENERATION (MWH)
Harris	Nuclear	0.470	6,541,858
Robinson 2	Nuclear	0.472	5,416,831
Brunswick	Nuclear	0.493	12,090,571
Robinson 1	Coal	3.207	972,873
Roxboro	Coal	3.570	14,713,303
Mayo	Coal	3.657	3,443,507
Asheville	Coal	3.661	2,156,835
Cape Fear	Coal	4.029	1,788,303
Sutton	Coal	4.128	2,632,128
Weatherspoon	Coal	4.353	641,705
Lee	Coal	4.448	1,748,143
Richmond Cty	Gas CC/CT	9.003/10.396	2,567,208

¹The average fuel costs for coal-fired plants include oil and/or gas cost for start-up and flame stabilization.

SETTLEMENT EXHIBIT LCF-7

SC Retail Comparison of Estimated to Actual Fuel Cost
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E

	2008	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2009	JAN	FEB	PERIOD
															AVERAGE
[1] ORIGINAL PROJECTION (\$/kWh)	2.326	2.258	2.435	2.956	3.586	3.164	2.493	2.837	2.810	2.770	2.808	2.661	2.759		
[2] ACTUAL EXPERIENCE (\$/kWh)	2.240	2.087	2.112	3.657	3.156	3.419	2.738	3.009	3.668	2.848	3.042	2.464	2.870		
[3] AMOUNT IN BASE (\$/kWh)	2.651	2.651	2.651	2.651	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151			
[4] VARIANCE FROM ACTUAL [1-2]/[2]	3.84%	8.19%	15.29%	-19.17%	13.62%	-7.46%	-8.95%	-5.72%	-23.39%	-2.74%	-7.69%	8.00%	-3.87%		

History of Cumulative Recovery Account Report
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E

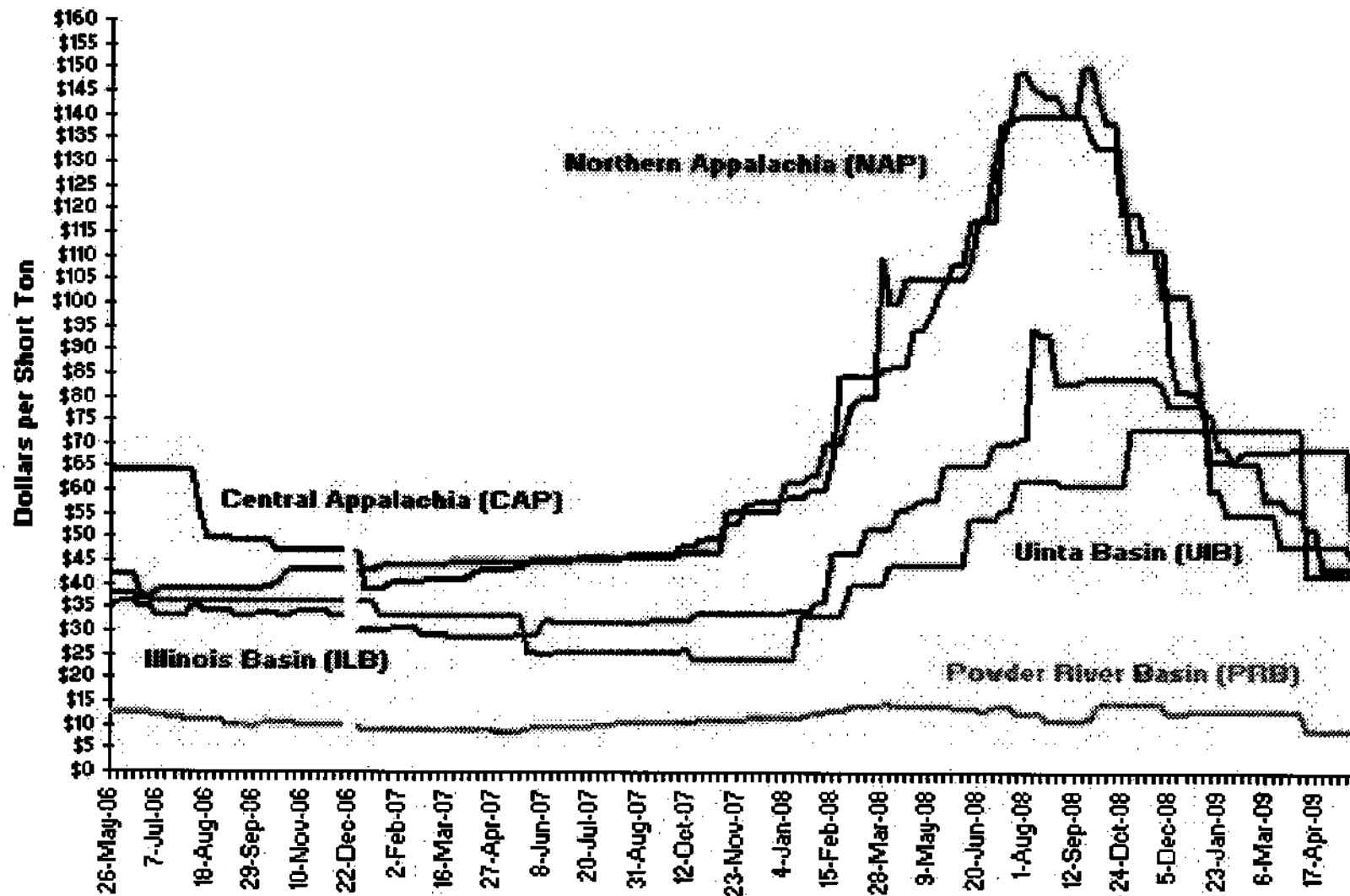
SETTLEMENT EXHIBIT
LCF-9

<u>PERIOD ENDING</u>	<u>OVER (UNDER)\$</u>
December-79	\$ 1,104,730
September-80	\$ (12,000,131)
March-81	\$ (4,060,364)
August-81	\$ (12,113,832)
March-82	\$ (935,412)
September-82	\$ (6,881,796)
March-83	\$ (2,259,114)
September-83	\$ (3,264,694)
March-84	\$ 109,270
September-84	\$ 2,172,859
March-85	\$ (2,317,008)
September-85	\$ 745,913
March-86	\$ 1,972,280
September-86	\$ (696,805)
March-87	\$ 2,408,354
September-87	\$ 3,310,059
March-88	\$ (3,964,888)
September-88	\$ (5,737,541)
March-89	\$ (8,125,496)
September-89	\$ (5,875,641)
March-90	\$ (9,311,149)
September-90	\$ (658,614)
March-91	\$ 1,403,023
September-91	\$ 4,661,988
March-92	\$ 5,201,112
September-92	\$ (6,712,920)
March-93	\$ (9,563,180)
September-93	\$ - ¹
March-94	\$ (1,010,684)
September-94	\$ 1,975,939
March-95	\$ 7,408,161
September-95	\$ 2,011,489
December-96	\$ 186,139
December-97	\$ (6,212,396)
December-98	\$ (14,334,022)
December-99	\$ (17,967,157) ²
December-00	\$ (18,627,471)
December-01	\$ (9,906,921)
December-02	\$ (7,393,266)
December-03	\$ (6,038,891)
March-05	\$ (27,537,237)
March-06	\$ (32,368,520)
March-07	\$ (22,834,137)
February-08	\$ (14,452,319)
February-09	\$ (9,966,147)

Note 1: Eliminated \$14,011,263 per Commission Order No. 93-865

Note 2: Reduced by \$6,500,000 per Commission Order No. 1999-324

**EIA Average Weekly Coal Commodity Spot Prices
Business Week Ended May 22, 2009**



Key to Coal Commodities by Region

<u>Central Appalachia:</u>	Big Sandy/Kanawha 12,500 Btu, 1.2 lb SO ₂ /mmBtu	<u>Powder River Basin:</u>	8,800 Btu, 0.8 lb SO ₂ /mmBtu
<u>Northern Appalachia:</u>	Pittsburgh Seam 13,000 Btu, 2.0 lb SO ₂ /mmBtu	<u>Uinta Basin in Colo.:</u>	11,700 Btu, 0.8 lb SO ₂ /mmBtu
<u>Illinois Basin:</u>	11,800 Btu, 5.0 lb SO ₂ /mmBtu		

Calculation of Environmental Fuel Component
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E

<u>Line</u>	<u>Class</u>	<u>Allocation Factor</u>	<u>Share of Projected Costs</u>	<u>Share of (Over)/Under-Recovery at June 30, 2009</u>	<u>Projected July 09 to June 10 SC Retail Sales (kWh)</u>	<u>Projected Demand Billing units (kW)</u>	<u>Projected Average Environmental Fuel Cost</u>	<u>(Over)/Under-Recovered Average Environmental Fuel Cost</u>	<u>Total Environmental Fuel Cost Component</u>
(1)	Residential	41.58%	\$1,147,836	(\$438,996)	2,206,024,178		0.052 ¢/kWh	(0.020) ¢/kWh	0.032 ¢/kWh
(2)	General Service (non demand)	5.40%	\$149,127	(\$57,034)	327,091,347	-	0.046 ¢/kWh	(0.017) ¢/kWh	0.028 ¢/kWh
(3)	General Service (demand)	53.02%	\$1,463,864	(\$559,862)	4,214,726,076	9,180,193	0.16 ¢/kW [1]	(0.06) ¢/kW [1]	0.10 ¢/kW
(4)	Lighting	0.00%	\$0	\$0	91,499,216		0.000	0.000	0.000
(5)	Total	100.00%	\$2,760,826	(\$1,055,892)	6,839,340,817	9,180,193			

SC Environmental Cost Projection

(6)	Projected SC Retail Sales from July 09 to June 10	6,839,340,817
(7)	Projected Total System Sales from July 09 to June 10	56,052,486,801
(8)	Allocation percentage to SC	0.12202
(9)	Projected Environmental Costs July 09 to June 10	\$22,626,013
(10)	SC Allocation of Projected Costs	\$2,760,826

[1] Rate is based on the Demand Billing Units

Comparison of Estimated Environmental Fuel Revenues and Expenses
Progress Energy Carolinas, Inc.
Docket No. 2009-1-E

Line	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09
(1) Estimated SO ₂ Expense [\$]	613,842	519,331	493,475	688,669	859,616	835,997	610,487	518,809
(2) Estimated Ammonia & Limestone Expense [\$]	1,585,234	1,357,527	1,467,674	1,588,777	1,700,571	1,678,034	1,433,436	1,402,184
(3) Estimated NOx Expense [\$]	28,377	28,479	55,907	76,266	98,737	94,440	66,381	28,449
(4) Estimated Off-System Sales [\$]	(361,821)	(129,099)	(139,170)	(144,862)	(204,809)	(198,921)	(162,344)	(180,326)
(5) Estimated Catalyst Depreciation [\$]	-	-	-	-	-	-	-	-
(6) Estimated Total Environmental Expense [\$]	1,865,633	1,776,239	1,877,886	2,208,850	2,454,115	2,409,550	1,947,960	1,769,116
(7) Estimated SC Allocation Factor of Total Expense	0.12363	0.12202	0.12202	0.12202	0.12202	0.12202	0.12202	0.12202
(8) SC Share of Total Environmental Expense [\$]	230,648	216,737	229,140	269,524	299,451	294,013	237,690	215,868
(9) Amount Billed to SC Customers [\$]	436,545	348,059	384,481	451,916	170,889	180,105	166,685	139,705
(10) Over (Under) Recovery [\$]	205,897	131,322	155,341	182,392	(128,562)	(113,908)	(71,005)	(76,163)
(11) Cumulative Under Recovery [\$]	586,837	718,159	873,500	1,055,892	927,330	813,422	742,417	666,254
Line	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10
(12) Estimated SO ₂ Expense [\$]	455,277	647,035	252,859	239,922	263,938	240,574	231,945	260,176
(13) Estimated Ammonia & Limestone Expense [\$]	1,451,105	1,601,411	1,625,887	1,538,603	1,642,587	1,256,986	1,592,798	1,621,644
(14) Estimated NOx Expense [\$]	25,224	32,643	43,186	39,869	44,822	39,443	73,533	83,579
(15) Estimated Off-System Sales [\$]	(189,279)	(203,835)	(237,646)	(204,408)	(172,120)	(89,765)	(142,902)	(19,817)
(16) Estimated Catalyst Depreciation [\$]	-	-	-	-	-	-	-	-
(17) Estimated Total Environmental Expense [\$]	1,742,327	2,077,253	1,684,286	1,613,985	1,779,227	1,447,238	1,755,374	1,945,582
(18) Estimated SC Allocation Factor of Total Expense	0.12202	0.12202	0.12202	0.12202	0.12202	0.12202	0.12202	0.12202
(19) SC Share of Total Environmental Expense [\$]	212,599	253,466	205,517	196,939	217,101	176,592	214,191	237,400
(20) Amount Billed to SC Customers [\$]	134,903	166,670	190,761	163,238	155,434	128,353	142,849	165,337
(21) Over (Under) Recovery [\$]	(77,696)	(86,796)	(14,756)	(33,701)	(61,667)	(48,239)	(71,342)	(72,063)
(22) Cumulative Under Recovery [\$]	588,559	501,762	487,007	453,306	391,639	343,400	272,058	199,995

